AL Ley's Docket No.: 042390.P8874

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION (FOR INTEL CORPORATION PATENT APPLICATIONS)

As a below named inventor, I hereby declare that:

My residence, mailing address and citizenship are as stated below, next to my name.

I believe I am the original, first, and sole inventor (if only one name is listed below) or an original, first, and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

DIRECT BUILD-UP LAYER ON AN ENCAPSULATED DIE PACKAGE HAVING A MOISTURE BARRIER STRUCTURE

the speci	ification of which			
		is attached hereto.		
	X	was filed onSepte United States Application or PCT International Appl	Number	09/660,757
		and was amended on		
		<i>,</i>	(if applicable)
used in the country to sale in the made the of American application. I acknow Federal I hereby patent or certificate	he United States of America before my invention thereof he United States of America e subject of an inventor's cer- ica on an application filed b on) or six months (for a des- vledge the duty to disclose a Regulations, Section 1.56. claim foreign priority benefi- inventor's certificate listed	a before my invention thereon or more than one year prior more than one year prior to tificate issued before the dat y me or my legal representat ign patent application) prior Il information known to me to its under Title 35, United St	f, or patented or described in to this application, that the sathis application, and that the e of this application in any coives or assigns more than two to this application. To be material to patentability ates Code, Section 119(a)-(died below any foreign applica	med invention was ever known or any printed publication in any une was not in public use or on invention has not been patented or puntry foreign to the United States elve months (for a utility patent as defined in Title 37, Code of), of any foreign application(s) for tion for patent or inventor's
	APPLICATION NUMBER	COUNTRY (OR INDICATE IF PCT)	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 37 USC 119 No Yes
				□ No □ Yes
				□ No □ Yes
	claim the benefit under Title all application(s) listed belo		ction 119(e) of any United S	tates
	NUMBER	FILING DATE		

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

APPLICATION NUMBER	FILING DATE	STATUS (ISSUED, PENDING, ABANDONED)

I hereby appoint the persons listed on Appendix A hereto (which is incorporated by reference and a part of this document) as my respective patent attorneys and patent agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith.

Send correspondence to:

Robert G. Winkle, Reg. No. 37,474, BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN, LLP

(Name of Attorney or Agent)

12400 Wilshire Boulevard, 7th Floor, Los Angeles, California 90025 and direct telephone calls to:

Robert G. Winkle, (503) 684-6200.

(Name of Attorney or Agent)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of Sole/First Inventor (given name, family name)	Qing Ma	
Inventor's Signature	Date /2/13/00	
Residence San Jose, California USA	Citizenship USA	
(City , State)	(Country)	
P. O. Address 919 Brentwood Drive		
San Jose, California 95129 USA		

rull Ivalile of Second/Joint Inventor (given name, family name)		
Inventor's Signature	Date	· · ·
Residence (City, State)	Citizenship	(Country)
		(Country)
P. O. Address		
	<u></u>	
Full Name of Third/Joint Inventor (given name, family name)		
Inventor's Signature		· · ·
Residence (City, State)	Citizenship	(Country)
P. O. Address		(==),
. O. Madi 000		
Full Name of Fourth/Joint Inventor (given name, family name)	Date	
Full Name of Fourth/Joint Inventor (given name, family name) Inventor's Signature		
Full Name of Fourth/Joint Inventor (given name, family name) nventor's Signature	Date Citizenship	(Country)
Full Name of Fourth/Joint Inventor (given name, family name) Inventor's Signature Residence (City, State)		
Full Name of Fourth/Joint Inventor (given name, family name) Inventor's Signature Residence (City, State)		
Full Name of Fourth/Joint Inventor (given name, family name) Inventor's Signature Residence		
Full Name of Fourth/Joint Inventor (given name, family name) Inventor's Signature Residence (City, State)		
Full Name of Fourth/Joint Inventor (given name, family name) Inventor's Signature Residence (City, State)	Citizenship	
Full Name of Fourth/Joint Inventor (given name, family name) Inventor's Signature Residence (City, State) P. O. Address	Citizenship	(Country)
Full Name of Fourth/Joint Inventor (given name, family name) Inventor's Signature	Citizenship Date	(Country)
Full Name of Fourth/Joint Inventor (given name, family name) Inventor's Signature (City, State) P. O. Address Full Name of Fifth/Joint Inventor (given name, family name) Inventor's Signature	Citizenship	(Country)

Full Name of Sixth/Joint Inventor (given name, family name)		
Inventor's Signature	Date	
Residence	Citizenship	
(City , State)		(Country)
P. O. Address		···
Full Name of Seventh/Joint Inventor (given name, family name)		•
nventor's Signature	Date	
Residence	Citizenship	
(City , State)		(Country,
P. O. Address		
		•
Full Name of Eighth/Joint Inventor (given name, family name)	_	
nventor's Signature	Date	
•	_	
nventor's Signature	Date	
nventor's Signature Residence (City, State)	Date	(Country)
Residence (City, State) O. O. Address Full Name of Ninth/Joint Inventor (given name, family name) nventor's Signature Residence	Date	(Country)
Residence (City, State) O. O. Address Full Name of Ninth/Joint Inventor (given name, family name) nventor's Signature	Date Citizenship Date	(Country)

Date	
Citizenship	
	(Country)
Date	
Citiconship	•
Citizenship	
Citizenship	(Country)
Citizenship	(Country)
	Citizenship

APPENDIX A

William E. Alford, Reg. No. 37,764; Farzad E. Amini, Reg. No. 42,261; William Thomas Babbitt, Reg. No. 39,591; Carol F. Barry, Reg. No. 41,600; Jordan Michael Becker, Reg. No. 39,602; Lisa N. Benado, Reg. No. 39,995; Bradley J. Bereznak, Reg. No. 33,474; Michael A. Bernadicou, Reg. No. 35,934; Roger W. Blakely, Jr., Reg. No. 25,831; R. Alan Burnett, Reg. No. 46,149; Gregory D. Caldwell, Reg. No. 39,926; Andrew C. Chen, Reg. No. 43,544; Thomas M. Coester, Reg. No. 39,637; Donna Jo Coningsby, Reg. No. 41,684; Florin Corie, Reg. No. 46,244; Dennis M. deGuzman, Reg. No. 41,702; Stephen M. De Klerk, Reg. No. P46,503; Michael Anthony DeSanctis, Reg. No. 39,957; Daniel M. De Vos, Reg. No. 37,813; Justin M. Dillon, Reg. No. 42,486; Sanjeet Dutta, Reg. No. P46,145; Matthew C. Fagan, Reg. No. 37,542; Tarek N. Fahmi, Reg. No. 41,402; George Fountain, Reg. No. 37,374; James Y. Go, Reg. No. 40,621; James A. Henry, Reg. No. 41,064; Willmore F. Holbrow III, Reg. No. P41,845; Sheryl Sue Holloway, Reg. No. 37,850; George W Hoover II, Reg. No. 32,992; Eric S. Hyman, Reg. No. 30,139; William W. Kidd, Reg. No. 31,772; Sang Hui Kim, Reg. No. 40,450; Walter T. Kim, Reg. No. 42,731; Eric T. King, Reg. No. 44,188; Erica W. Kuo, Reg. No. 42,775; George B. Leavell, Reg. No. 45,436; Kurt P. Leyendecker, Reg. No. 42,799; Gordon R. Lindeen III, Reg. No. 33,192; Jan Carol Little, Reg. No. 41,181; Robert G. Litts, Reg. No. 46,876; Joseph Lutz, Reg. No. 43,765; Michael J. Mallie, Reg. No. 36,591; Andre L. Marais, under 37 C.F.R. § 10.9(b); Paul A. Mendonsa, Reg. No. 42,879; Clive D. Menezes, Reg. No. 45,493; Chun M. Ng, Reg. No. 36,878; Thien T. Nguyen, Reg. No. 43,835; Thinh V. Nguyen, Reg. No. 42,034; Dennis A. Nicholls, Reg. No. 42,036; Daniel E. Ovanezian, Reg. No. 41,236; Kenneth B. Paley, Reg. No. 38,989; Gregg A. Peacock, Reg. No. 45,001; Marina Portnova, Reg. No. P45,750; William F. Ryann, Reg. 44,313; James H. Salter, Reg. No. 35,668; William W. Schaal, Reg. No. 39,018; James C. Scheller, Reg. No. 31,195; Jeffrey S. Schubert, Reg. No. 43,098; George Simion, Reg. No. P47,089; Jeffrey Sam Smith, Reg. No. 39,377; Maria McCormack Sobrino, Reg. No. 31,639; Stanley W. Sokoloff, Reg. No. 25,128; Judith A. Szepesi, Reg. No. 39,393; Vincent P. Tassinari, Reg. No. 42,179; Edwin H. Taylor, Reg. No. 25,129; John F. Travis, Reg. No. 43,203; Joseph A. Twarowski, Reg. No. 42,191; Mark C. Van Ness, Reg. No. 39,865; Thomas A. Van Zandt, Reg. No. 43,219; Lester J. Vincent, Reg. No. 31,460; Glenn E. Von Tersch, Reg. No. 41,364; John Patrick Ward, Reg. No. 40,216; Mark L. Watson, Reg. No. P46,322; Thomas C. Webster, Reg. No. P46,154; and Norman Zafman, Reg. No. 26,250; my patent attorneys, and Raul Martinez, Reg. No. 46,904, my patent agents, of BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP, with offices located at 12400 Wilshire Boulevard, 7th Floor, Los Angeles, California 90025, telephone (310) 207-3800, and Alan K. Aldous, Reg. No. 31,905; Robert D. Anderson, Reg. No. 33,826; Joseph R. Bond, Reg. No. 36,458; Richard C. Calderwood, Reg. No. 35,468; Paul W. Churilla, Reg. No. P47,495; Jeffrey S. Draeger, Reg. No. 41,000; Cynthia Thomas Faatz, Reg No. 39,973; Sean Fitzgerald, Reg. No. 32,027; John N. Greaves, Reg. No. 40,362; Seth Z. Kalson, Reg. No. 40,670; David J. Kaplan, Reg. No. 41,105; Charles A. Mirho, Reg. No. 41,199; Leo V. Novakoski, Reg. No. 37,198; Naomi Obinata, Reg. No. 39,320; Thomas C. Reynolds, Reg. No. 32,488; Kenneth M. Seddon, Reg. No. 43,105; Mark Seeley, Reg. No. 32,299; Steven P. Skabrat, Reg. No. 36,279; Howard A. Skaist, Reg. No. 36,008; Steven C. Stewart, Reg. No. 33,555; Raymond J. Werner, Reg. No. 34,752; Robert G. Winkle, Reg. No. 37,474; Steven D. Yates, Reg. No. 42,242, and Charles K. Young, Reg. No. 39,435; my patent attorneys, Thomas Raleigh Lane, Reg. No. 42,781; Calvin E. Wells; Reg. No. P43,256, Peter Lam, Reg. No. 44,855; Michael J. Nesheiwat, Reg. No. P47,819; and Gene I. Su, Reg. No. 45,140; my patent agents, of INTEL CORPORATION; and James R. Thein, Reg. No. 31,710, my patent attorney; with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith.

S/N 09/660,757

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Qing Ma

Examiner: Unknown

Serial No.:

09/660,757

Group Art Unit: Unknown

Filcd:

September 13, 2000

Docket: 884.803US1

Title:

Direct Build-up Layer on an Encapsulated Die Package Having a Moisture Barrier

Structure

<u>CERTIFICATE UNDER 37 CFR §3.73(b)</u>

Commissioner for Patents Washington, D.C. 20231

In accordance with 37 C.F.R. Section 1.36, M.P.E.P. Section 402.05 and 402.07, please revoke any existing Powers of Attorney, if any, and appoint the following attorneys and/or patent agents to prosecute this application and to transact all business in the Patent and Trademark Office in connection therewith:

Aldous, Alan K.	Reg. No. 31,905	Harris, Robert J.	Rcg. No. 37,346
Anglin, J. Michael	Reg. No. 24,916	Huter, Jeffrey B.	Reg. No. 41,086
Arora, Suncel	Rcg. No. 42,267	Jackson Huchsch, Katharine	
Bacon, Shireen 1.	Rcg. No. 40,494	Jurkovich, Patti J.	Reg. No. 44,813
Beekman, Marvin L.	Reg. No. 38,377	Kacvinsky, John	Rcg. No. 40,040
Berdie, Raymond R.	Reg. No. 50,769	Kalis, Janal M.	Reg. No. 37,650
Bianchi, Timothy E.	Reg. No. 39,610	Kalson, Seth Z.	Reg. No. 40,670
Billion, Richard E.	Reg. No. 32,836	Kaplan, David J.	Reg. No. 41,105
Black, David W.	Reg. No. 42.331	Klima-Silberg, Catherine I.	Reg. No. 40,052
Brake, R. Edward	Rcg. No. 37,784	Kluth, Daniel J.	Reg. No. 32,146
Brennan, Thomas F.	Reg. No. 35,075	Lucy, Rodney L.	Rcg. No. 41,136
Brooks, Edward J., III	Reg. No. 40,925	Lam, Peter	Reg. No. 44,855
Burge, Ben	Reg. No. 42,372	Lemaire, Charles A.	Reg. No. 36,198
Burtzlaff, Robert A.	Reg. No. 35,466	LcMoinc, Dana B.	Reg. No. 40,062
Chadwick, Robin A.	Rcg. No. 36,477	Lin, Issac	Reg. No. 50.672
Chen, George	Reg. No. 50.807	Lundberg, Steven W.	Reg. No. 30,568
Choi, Glen B.	Reg. No. 43,546	Lundmark, David C.	Reg. No. 42,815
Clark, Barbara J.	Reg. No. 38,107	Maki, Peter C.	Rcg. No. 42,832
Clise, Timothy B.	Reg. No. 40,957	Malen, Peter L.	Reg. No. 44,894
Cochran, David R.	Reg. No. 46,632	Martinez, Anthony	Rcg. No. 44,223
Cool, Kenneth	Reg. No. 40,570	Mates, Robert E.	Reg. No. 35,271
Dahl, John M.	Rcg. No. 44,639	McCrackin, Ann M.	Reg. No. 42,858
Draeger, Jeffrey S.	Reg. No. 41,000	McGough, Kevin J.	Reg. No. 31,279
Drake, Eduardo E.	Reg. No. 40,594	McTavish, Hugh E.	Reg. No. 48,341
Embresson, Janes E.	Rcg. No. 39,665	Mehrle, Joseph P.	Reg. No. 45,535
Faalz, Cynthia Thomas	Reg. No. 39,973	Mennemeier, Larry	Rcg. No. 51,003
Forrest, Bradley A.	Reg. No. 30.837	Muller, Mark V.	Reg. No. 37,509
Gagne, Christopher	Rcg. No. 36,142	Nagy, Paul	Reg. No. 37,896
Gamon, Owen J.	Reg. No. 36,143	Nama, Kash	Rcg. No. 44,255
Gorrie, Gregory J.	Reg. No. 36,530	Nelson, Albin J.	Reg. No. 28,650
Gorlych, Joseph E.	Reg. No. 41,791	Nicholls, Dennis A.	Reg. No. 42,036
Greaves, John N.	Reg. No. 40,362	Nielsen, Walter W.	Rcg. No. 25,539
Green, Sharmini N.	Rcg. No. 41,410	Novakoski, Leo V.	Reg. No. 37,198
Greenwald, Bradley	Rcg. No. 34,341	Padys, Danny J.	Reg. No. 35,635
Haack, John L.	Reg. No. 36,154	Parker, J. Kevin	Rcg. No. 33,024
		• • • • • • • • • • • • • • • • • • • •	

REVOCATION AND POWER OF ATTORNEY

Serial Number: 09/660,757 Filing Date: September 13, 2000

Title: Direct Build-up Layer on an Encapsulated Die Package Having a Moisture Barrier Structure

Page 2 Dkt: 884.803US1

Parker, Lanny	Reg. No. 44,281	Steiner, Paul E.	Reg. No. 41,326
Perdok, Monique M.	Reg. No. 42,989	Stordal, Leif T.	Reg. No. 46,251
Peret, Andrew R.	Reg. No. 41,246	Terry, Kathleen R.	Reg. No. 31,884
Peterson, David C.	Reg. No. 47,857	Tong, Viet V.	Reg. No. 45,416
Prout, William F.	Reg. No. 33,995	Tran, David	Rcg. No. 50.804
Reif, Kevin A.	Rcg. No. 36,381	Viksnins, Ann S.	Reg. No. 37,748
Reynolds, Thomas C.	Reg. No. 32,488	Wells, Calvin E.	Reg. No. 43,256
Schuinm, Sherry W.	Reg. No. 39,422	Willardson, Michael	Rcg. No. 50.856
Schwegman, Micheal L.	Rcg. No. 25,816	Winkle, Robert G.	Reg. No. 37,474
Seddon, Kenneth M.	Reg. No. 43,105	Woessner, Warren D.	Rcg. No. 30,440
Seeley, Mark	Rcg. No. 32,299	Wong, Sharon	Reg. No. 37,760
Skabrat, Steven P.	Reg. No. 36,279	Ystes, Steven D.	Reg. No. 42,242
Skaist, Howard A.	Rcg. No. 36,008	Young, Charles K.	Reg. No. 39,435
Speier, Gary J.	Reg. No. 45,458		
Steffey, Charles E.	Rev. No. 25,179		

CERTIFICATE UNDER 37 CFR §3.73(b)

Intel Corporation hereby certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of an assignment from the inventor filed December 26, 2000 and recorded on Reel 011393, Frames 0834 - 0836. To the best of my knowledge and belief, title is in Intel Corporation, the assignee.

Pursuant to 37 C.F.R. §3.73(b) I hereby declare that I, Mr. Thomas Reynolds, am empowered to sign this certificate on behalf of Intel Corporation, the assignee.

I hereby declare that all statement made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true.

Please direct all correspondence in this case to:

Schwegman, Lundberg, Woessner & Kluth, P.A. P.O. Box 2938
Minneapolis, MN 55402
Telephone No. (612)373-6900

Date 8-26-02

Mr. Thomas Reynolds

Title: Director of Patents